

Claims

1. A system for timing an image acquisition, comprising:
a source controller triggering an optical source to illuminate a target; and
a delay block coupled the source controller, imposing a delay interval starting at
5 the triggering of the optical source, the delay block triggering an image acquisition at the
end of the delay interval, wherein after the image acquisition the source controller turns the
optical source off.

2. The system of claim 1 wherein triggering the optical source to illuminate the
10 target includes detecting a transition that turns the optical source off, imposing a delay
period that starts at the detected transition, and actuating a trigger at the end of the delay
period for triggering the optical source to illuminate the target.

3. The system of claim 2 wherein the delay interval defines an optical charge
15 pulse.

4. The system of claim 1 wherein the source controller provides a first control
signal to the optical source and to the delay block, and wherein the delay block generates a
second control signal in response to the first control signal.

20 5. The system of claim 4 wherein the first control signal includes a first transition
triggering the optical source to illuminate the target and a second transition that turns the
optical source off.

6. The system of claim 4 wherein the second control signal includes a transition triggering the image acquisition at the end of the delay interval.

7. The system of claim 5 wherein the second control signal includes a transition
5 triggering the image acquisition at the end of the delay interval.

8. The system of claim 4 wherein triggering the image acquisition includes providing the second control signal to an image processor within an optical imaging system.

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9. The system of claim 5 wherein triggering the image acquisition includes providing the second control signal to an image processor within an optical imaging system.

10. The system of claim 8 wherein the delay interval defines an optical charge
15 pulse that provides light to a sensor within the optical imaging system prior to the triggering the image acquisition.

11. The system of claim 9 wherein the delay interval defines an optical charge
20 pulse that provides light to a sensor within the optical imaging system prior to the triggering the image acquisition.

12. A method for timing an image acquisition, comprising:

triggering an optical source to illuminate a target;

imposing a delay interval starting at the triggering of the optical source;

triggering an image acquisition at the end of the delay interval; and

5 turning the optical source off.

13. The method of claim 12 wherein triggering the optical source to illuminate the target includes detecting a transition that turns the optical source off, imposing a delay period that starts at the detected transition, and actuating a trigger at the end of the delay
10 period for triggering the optical source to illuminate the target.

14. The method of claim 12 wherein the delay interval defines an optical charge pulse that provides light to a sensor within an optical imaging system prior to the triggering the image acquisition.
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15. The method of claim 13 wherein the delay interval defines an optical charge pulse that provides light to a sensor within an optical imaging system prior to the triggering the image acquisition.

20 16. The method of claim 12 wherein the triggering the optical source to illuminate the target is provided by a first transition and the turning the optical source off is provided by a second transition.

17. The method of claim 12 further comprising providing a first control signal triggering the optical source to illuminate the target.

18. The method of claim 16 further comprising providing a first control signal that
5 provides the first transition and the second transition.

19. The method of claim 17 further comprising providing a second control signal in response to the first control signal, the second control signal triggering the image acquisition at the end of the delay interval.

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20. The method of claim 18 further comprising providing a second control signal in response to the first control signal, the second control signal triggering the image acquisition at the end of the delay interval.